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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/988,208	11/19/2001	Kazuyuki Ohhashi	P21699	8111	
7055	7590 09/27/2005		EXAMINER		
	UM & BERNSTEIN,	AGHDAM, FRESHTEH N			
1950 ROLAND CLARKE PLACE RESTON, VA 20191			ART UNIT	PAPER NUMBER	
123131,			2631		
			DATE MAILED: 09/27/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Ар	plication No.	Applicant(s)				
		09	/988,208	OHHASHI, KAZUYUKI				
Office Action Summary			aminer	Art Unit				
			shteh N. Aghdam	2631				
Period fo	The MAILING DATE of this communic or Reply	cation appears	on the cover sheet with the	correspondence address				
WHIC - Exter after - If NC - Failu Any r	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MANSIONS OF TIME MANSIONS OF THE MANSI	AILING DATE of 37 CFR 1.136(a). unication. utory period will app vill, by statute, cause	OF THIS COMMUNICATION In no event, however, may a reply be to say and will expire SIX (6) MONTHS from the application to become ABANDON	N. imely filed in the mailing date of this communication. ED (35 U.S.C. § 133).				
Status								
1) 又	Responsive to communication(s) filed	d on <i>03 Mav 2</i>	005.					
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3)	· · · · · · · · · · · · · · · · · · ·							
ŕ	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠	4)⊠ Claim(s) <u>5-12</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5) 🗌								
6)⊠	Claim(s) <u>5-12</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)[8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers							
9)	The specification is objected to by the	Examiner.						
10)	The drawing(s) filed on is/are:	a) accepted	d or b) objected to by the	Examiner.				
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including t	the correction is	required if the drawing(s) is o	ojected to. See 37 CFR 1.121(d).				
11)	The oath or declaration is objected to	by the Examir	ner. Note the attached Offic	e Action or form PTO-152.				
Priority ι	ınder 35 U.S.C. § 119							
,	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies o	•		ed in this National Stage				
	application from the Internation	•						
* \$	See the attached detailed Office action	i for a list of th	e certified copies not receiv	ed.				
Attachmen			🗖					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)			4) 🔲 Interview Summar Paper No(s)/Mail [
3) 🔲 Inform	nation Disclosure Statement(s) (PTO-1449 or F r No(s)/Mail Date			Patent Application (PTO-152)				

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DETAILED ACTION

Response to Arguments

This office action is in response to the communication filed 05/03/2005, the subject matters of claims 5-12 were indicated as allowable subject matter previously. However, further consideration of claims 5-12 indicates that the subject matters of claims 5-12 are not allowable in view of McVey and Thorson.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-6 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over McVey (US 6,574,286), and further in view of Thorson (US 6,101,225).

As to claims 5 and 11, McVey teaches a modulation system comprising an amplitude adjustment circuit that adjusts the amplitude of the signal output from an applied phase offset (Fig. 1, means 80, 88, 44, 46, and 146); a phase shift calculation circuit that gives the signal output from said amplitude adjustment circuit a phase offset in the range of Θ ε [0, 2π] see (Fig. 1, means 46, 146, 100; Col. 4, Lines 24-42). McVey is silent about a sign inversion circuit that gives a phase offset of a multiple of 90° by inverting the sign binary data. Thorson teaches a method and apparatus for performing

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a modulation comprising using sign information signal to perform a phase change of 180° on the reference phase signals (Fig. 2, means 111 and 113; Col. 5, Lines 36-51). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Thorson with McVey in order to remove one bit of information originally needed to provide full modulation capability (Col. 5, Lines 45-47).

As to claims 6 and 12, McVey teaches a phase shift calculation circuit that gives the signal output from said amplitude adjustment circuit a phase offset in the range of Θ ε [0, 2π] see (Fig. 1, means 46, 146, 100; Col. 4, Lines 24-42). One of ordinary skill in the art would clearly recognize that Θ may equal the fixed phase offset of zero.

Claims 7-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over McVey and Thorson, further in view of the instant application's disclosed prior art.

As to claims 7-8 and 10, McVey teaches a modulation system comprising an amplitude adjustment circuit that adjusts the amplitude of the signal output from an applied phase offset (Fig. 1, means 80, 88, 44, 46, and 146); a phase shift calculation circuit that gives the signal output from said amplitude adjustment circuit a phase offset in the range of $\Theta \in [0, 2\pi]$ see (Fig. 1, means 46, 146, 100; Col. 4, Lines 24-42). McVey is silent about a sign inversion circuit that gives a phase offset of a multiple of 90° by inverting the sign binary data; and a transmission control section that provides phase control information to the phase offset circuit based on a message from a mobile station included in a reception. Thorson teaches a method and apparatus for performing a modulation comprising using sign information signal to perform a phase change of 180° on the reference phase signals (Fig. 2, means 111 and 113; Col. 5, Lines 36-51).

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Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Thorson with McVey in order to remove one bit of information originally needed to provide full modulation capability (Col. 5, Lines 45-47). The instant application disclosed prior art teaches a transmission control section that provides

phase control information to the phase offset circuit based on a message from a mobile station included in a reception (Pg. 1, Lines 22-28; Pg. 2, Lines 1-5). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of the instant application's disclosed prior art with McVey and Thorson in order for the mobile station to improve the level of a reception signal and clearly distinguish between interference signals from other mobile stations and the original reception signal (Pg. 2, Lines 3-5).

As to claim 8, McVey teaches a phase shift calculation circuit that gives the signal output from said amplitude adjustment circuit a phase offset in the range of Θ ε $[0, 2\pi]$ see (Fig. 1, means 46, 146, 100; Col. 4, Lines 24-42). One of ordinary skill in the art would clearly recognize that Θ may equal the fixed phase offset of zero.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hileman et al (US 3,497,625) see figure 6; and Nishikawa (US 6,014,065) see 1-3 and 5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freshteh N. Aghdam whose telephone number is (571). Application/Control Number: 09/988,208 Page 5

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272-6037. The examiner can normally be reached on Monday through Friday 9:00-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Freshteh Aghdam

September 19, 2005